



Astronaut Bernard Harris receives a memento in recognition of his involvement in Alabama Aerospace Week. Harris, honorary co-chairman of the event, spoke at the Von Braun Center on Monday as part of the week's "Liftoff '97" festivity attended by some 2,000 students from Huntsville City Schools and Madison County Schools. Aerospace Week, sponsored by the Alabama Education Association, receives support from Marshall employees in the form of workshops, curriculum support materials, and presentations at schools.

MSL-1 Mission Clears Key Step

A 24-hour joint integrated simulation on Feb. 27-28 marked completion of the last major event of scheduled training for crew and cadre members assigned to the STS-83/MSL-1 Space Shuttle mission. MSL-1 is a Marshall-managed Spacelab mission. Science teams and payload controllers supporting the 13 major MSL investigations participated in the simulation from facilities at the Marshall Center and from remote science operations sites at the Lewis Research Center in Cleveland, Ohio; Boulder, Colorado; and Tsukuba, Japan. STS-83 crew members and flight controllers participated at Mission Control-Houston.

"With the completion of the second Joint Integrated Simulation we've taken one of the last key steps toward readiness to

launch the mission," said MSL Mission Manager Teresa Vanhooser. "The entire MSL mission team has come together very well and we're ready to support the operations of this very exciting microgravity science mission."

"MSL-1 is an attempt to study basic physical phenomena in combustion and materials sciences without the influence of gravity," explained Mission Scientist Dr. Michael Robinson. "We're looking forward to getting the mission started." MSL-1 is targeted to fly aboard Columbia in early April.

Taylor Named Deputy of S&E

William Taylor, who has been on a one-year detail as deputy chief engineer in the office of the NASA Administrator, has been assigned as deputy director of Marshall's Science and Engineering Directorate. Prior to his detail to Washington, D. C., Taylor was manager of the Space Station Furnace Facility in the Science and Applications Projects Office at the Marshall Center.



William Taylor

Taylor joined Marshall in 1964, holding positions in such areas as the Systems Analysis and Integration Laboratory, Hubble Space Telescope Project Office, the Observatory Projects Office and the Science and Applications Office.

In his new assignment, he will assist in overseeing the S&E Directorate including research and development in areas related to engineering design, systems engineering, systems integration, material process engineering, physical science engineering, data analysis and system simulation.

March: Women's History Month

Editor's Note: Following is a proclamation by President Bill Clinton to mark the month of March as Women's History Month.

Throughout the history of our Nation, women have played a pivotal role in bringing about positive change to every aspect of American life, and their achievements continue to touch the lives of every single citizen. Women's History Month honors the women who made these accomplishments possible, securing their rightful place in history among those who have made our country great. This month, we celebrate these women's lives — and renew our commitment to breaking down the gender barriers that still exist.

Through their courage, foresight, and community spirit over

'Life on Mars' Talk by Hoover Excites Audience at UAH

Mention subjects such as “extraterrestrial life,” or “primitive life forms found on Mars,” and many listeners, even in a general-public audience, will perk up and pay close attention.

As the discussion starts delving into details, though — for instance, things like the use of laser mass spectrometry, study of carbonate globule structures, or searching for the presence of polycyclic aromatic hydrocarbons — attention tends to drop off drastically. Many eyes start to glaze over.

Nevertheless, bridging the gap from the level of newspaper headlines to that of scientific-paper details — and maintaining the interest of a general audience — is possible, as Richard Hoover of Marshall’s Space Sciences Lab proved again last week.

Hoover, whose primary specialty is astrophysics, spoke and showed slides to an honors forum class at the University of Alabama in Huntsville, a freshman and sophomore-range group of students with a sprinkling of other interested persons mixed in. The attentiveness shown by the audience indicated that last summer’s tremendous burst of interest in the possibility of Martian life has by no means died out.

Hoover summarized for the audience the findings which resulted in a high-profile announcement in early August, 1996. A NASA-funded team had found: the first organic molecules that apparently are of Martian origin; several mineral features characteristic of biological activity; and possible microscopic fossils of primitive, bacteria-like organisms inside an ancient Martian rock that fell to Earth as a meteorite. It was found in Antarctica in 1984.

The upshot of work by the team from Johnson Space Center and Stanford University, Hoover explained, was a body of

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Hoover displays a meteorite during his address to a UAH honors forum class.

AIAA Engineer of the Year is Marshall's Danny Johnston

Danny Johnston of Marshall’s Systems Analysis and Integration Laboratory was named Engineer of the Year by the Alabama/Mississippi section of the American Institute of Aeronautics and Astronautics (AIAA) during the Huntsville/Madison County Engineers’ Week Banquet on Feb. 20.



Danny Johnston

Johnston was selected based on his involvement with the construction and activation of the Marshall Center X-ray Calibration Facility where he technically directs the XRCF integration activities.

“To receive such an award makes me feel that I do a good job for NASA,” Johnston said. “I want to thank the people who work on the project with me because I could’nt have done it without their capabilities.”

During his 29-year NASA career, Johnston has also worked in managing the Hubble Space Telescope Integration and leading the first team to replan the initial phase of the solid rocket booster return to flight.



These five women have “heard it through the grapevine” that The Raisins plan to entertain at this year’s Retirement Dinner. From left are Jane Locke, Karen Dugard, Judy Barron, Melanie Aldridge and Gloria Tidmore.

Marshall Engineer Dahm Still Going Strong at 80

Celebrating one's 80th birthday — as Werner Dahm of the Structures and Dynamics Laboratory did recently — is a major milestone, especially for someone who's still actively working full time. But if that's not enough, Dahm will soon mark completion of 50 years of government service.



With a youthful outlook and appearance — he considers the latter part of his inheritance — Dahm drives to his office in Building 4610 every day and continues to practice his specialty as an aerodynamics engineer.

"I like my work," says Dahm. "I still

come to work so I can help the younger people get a better start."

That knowledge and experience, according to younger colleagues such as Dr. Jay Sambamurthi, is invaluable.

"Mr. Dahm has been a mentor for several generations of engineers in the Fluid Dynamics Branch," Sambamurthi said. "He is basically our living library for technical information on rocketry and has a 3x5 index card for just about any engineering topic you can think up. In the area of aerodynamics, he can explain difficult concepts in simple terms so that almost anyone can understand."

Dahm, who observed his 80th birthday in February and will complete 50 years of government service in August, began his remarkable career in 1941 as an aerodynamicist in Peenemuende, Germany. There, he worked as part of Dr. Wernher von Braun's group designing the winged A-4 or V-2 and the Wasserfall anti-aircraft rocket.

At the end of World War II, "Project Paperclip" was the code name for the now-familiar U.S. program to bring talented engineers from Germany to the United States to work under contract to the Army, Navy and Air Force.

"In 1946 my former boss had an American officer contact me

at home to offer me a "Paperclip" contract to go to Fort Bliss, Texas and work with my former colleagues," said Dahm. "I accepted the contract and came to the United States in 1947."

In 1950 the Army transferred Dahm and his colleagues to Redstone Arsenal where, in 1951, they began work on the Redstone, the Army's first heavy ballistic missile. Because of his aerodynamics background, Dahm said, his involvement was to design the vehicle's shape.

The decade of the 1950s saw Dahm and his colleagues engaged in a rapidly expanding Army program, designing missiles and large launch vehicles. Then in 1960, he was transferred to the new Marshall Space Flight Center where he has pursued his chosen field of aerodynamics ever since.

Over the years, he has had several inventions, earning patents for devices including a Wind Measurement System, Focused Laser Doppler Velocimeter and Clear Air Turbulence Detector.

The obvious question is, does the octogenarian plan on retiring any time soon?

Pointing to several stacks of paperwork on his table, Dahm says "I have to finish a few more things first."

Coworker Jay Sambamurthi, for one, is pleased to hear that. "I am extremely glad that he is continuing to remain here as an engineer instead of opting for retirement," he says.

Craft Honored as Outstanding EE Alumnus of Auburn

Auburn University's College of Engineering has honored Harry Craft, manager of Marshall's Technology Transfer Office, with its 1997 Electrical Engineering Outstanding Alumni Award.

The award was presented at the 1997 Engineers Honors Banquet highlighting National Engineering Week at Auburn.



Harry Craft

Craft, selected by the College of Engineering's electrical engineering faculty, has been manager of the Marshall Technology Transfer Office since March 1994.

This recognition for Craft is the most recent of a harvest of awards he has received in recent years. Craft was the 1995 recipient of the Auburn University Alumni Engineering Council's Distinguished Auburn

Engineer Award. He also was the 1995 recipient of the Holger N. Toftoy Award for outstanding technical management from the Alabama-Mississippi Section of the American Institute of Aeronautics and Astronautics. Craft also was named manager of the year for 1993 by the local chapter of the National Management Association. In 1992, Craft was honored as a Meritorious Executive, received the Presidential Rank Award, and was presented with the NASA Outstanding Leadership Medal.

MMA Meeting Set for March 13

The Marshall Management Association (MMA) will meet at 5:30 p.m. March 13 at the Marriott. William B. Rouse will speak on the 13 delusions that most often undermine strategic thinking and jeopardize organizations' abilities to develop and execute competitive strategies. The meeting is open to all civil service personnel. The cost is \$15 and is payable at the door. Reservations deadline is Tuesday. Contact John Cather via e-mail or at 4-1743.

Pirani Bowls His Way to Success

by Nancy Robinson

At the Von Braun Center's South Hall, the sound of bowling balls knocking down pins goes on day and night. For the next few months, over 9,400 teams are competing in the annual American Bowling Congress tournament being held this year in Huntsville.

Above the din of pins and balls there was some eager cheering of hometown fans recently as Marshall Center's own Joey Pirani and four North Alabama teammates bowled 45 games during the second week of the event. Now they must await completion of the tournament to see how they placed.

With 50,000 participants, Pirani admits the competition is going to be rough, but that doesn't daunt a dedicated sportsman like Pirani. In the 1994-95 season, he held Huntsville's highest singles average of 219. When coupled with consistent bowling from his teammates you have a really strong, competitive standing. Pirani hopes that with a bit of luck this tournament might pay him enough winnings to finance his trip to next year's competition. This is the eleventh national tournament in which he has bowled. The only difference this year, he pointed out, is that he didn't get to travel to Los Vegas or

some other new locale. The positive side though, is that being local gives him the opportunity to participate in activities outside the actual tournament.

When he's not bowling, Pirani is an electronics engineer with the Information

Systems Services Office. He has electronic mail, network security, and remote access as his daily responsibilities, but in his spare time he maintains a World Wide Web page for the bowling he loves. When he began playing at age 10,

Pirani was a third-generation bowler and he says he already is passing the sport along to his three-year-old daughter, Elizabeth. With fatherly pride, Pirani says Elizabeth "did great" when father and daughter competed in their first tournament last December.

When asked how he felt about his standings in the tournament, Pirani said it was especially great to bowl well and do it in front of your home town irregardless of where you actually finish.



Joey Pirani (front right) is shown with teammates from left (front) Dave Argenti, Jeff McCorvey and from back left, Bill Leach and Tony Churchey.

'Life on Mars' Talk

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evidence that strongly suggests primitive life may have existed on Mars more than three and one-half billion years ago.

What may have helped keep this audience attentive is that Hoover's discussion took a broad sweep, going beyond the particulars of fossil bacteria on a Martian meteorite. "Our entire set of ideas about the terrestrial ecosystem are having to be altered as a result of these recent findings," he told the group, backing up that assertion with evidence from a variety of research areas.

Hoover's interest in, and detailed familiarity with the subject is closely tied to his longstanding involvement with a specialized area of biology — the study of diatoms. Weaving that subject into his presentation, he showed the forum attendees a series of photomicrographs he has made over the years, revealing the beautiful and complex structures of these primitive life forms. Diatoms have existed on Earth for some 100 million years. Hoover also described microscopic organisms called nanobacteria, which are remarkably similar in size and shape to the fossilized Martian microorganisms.

He concluded the session by fielding questions and showing the group several meteorite samples.



Speaker Dr. Danny Blanchard, fourth from left, keyboardist Kelvin Wooten, third from left, and the vocal group Connect 5 were featured during Marshall's Black History Program Friday.



Center Event to Focus on Solar Thermal Propulsion

A Solar Thermal Propulsion Workshop will be held at the Marshall Center on March 19-20.

The objectives of the workshop are to bring forth on-going technology activities in solar thermal propulsion, identify and develop technology roadmaps and define flight validation tests that will lead to the design and development of a fully operational Solar Thermal Upper Stage.

Participation is expected from NASA, other government agencies, industry representatives (U.S. and international) involved in the field, and universities.

Those interested in attending the workshop or requiring more information should contact Saroj Patel at 4-0591.

MMA to Offer Four Scholarships

The Marshall Management Association Merit Scholarship, an award offered by the organization to recognize academic achievement and leadership qualities of sons and daughters of Marshall (civil service) employees and retirees, will award four \$1,500 scholarships to students. Two will be offered to graduating high school seniors entering an accredited college or university in the fall of 1997, and two will be offered to freshmen who are presently enrolled in an accredited college or university during the 1996/1997 school year.

The association will select the scholarship recipients in May. Financial need will not be a factor. Additional information and applications is available in Room 31 of Building 4250 or by calling 544-3221. The deadline for submitting an application is April 15.

ISO 9000 Registration Briefings Set

For the Marshall Center to receive ISO 9000 Registration, all employees are required to receive a brief orientation. During



March the training branch will offer training with a flexible schedule. The training will provide insight to ISO 9000 and define the

ISO 9000 Elements. Anyone who has not attended or scheduled for ISO 9000 Introduction to Quality Systems, Executive Overview, Lead Assessor, or Internal Auditor Training must attend one of these classes. See your Administrative Officer for scheduling. MSFC Form 59 is not required. Training will be held in the Morris Auditorium. The schedule is:

March 18 — 1 - 3 p.m.

March 19 — 7:30 - 9:30 a.m.; 10 a.m. - noon; and 1 - 3 p.m.

March 20 — 7:30 - 9:30 a.m.; 10 a.m. - noon; and 1 - 3 p.m.

Women's History

from page 1

the years, American women have created a world of opportunity for today's heroines and role models — women such as Secretary of State Madeleine Albright, the highest ranking woman to serve in any presidential administration; Dr. Shannon W. Lucid, who has performed five historic and complex Space Shuttle missions during 18 years with NASA and recently broke the American and women's world record for continuous time in space; Oseola McCarty, who in 1995 donated the life savings she had earned as a maid to fund scholarships at the University of Mississippi; and Julie Su, the young attorney who first came to prominence through her efforts to expose illegal exploitation of Thai immigrants in a California sweatshop and who continues to help immigrants to secure proper medical care, employment, and the dignity they deserve. The pioneers in women's history would be proud of today's women pioneers.

As we approach the 21st century, we have reached another significant milestone in our Nation's history: Women have approached an almost equal share in the labor force. Thus, it is more important than ever that we enable women and men to meet their responsibilities at work and at home.

Women continue to break the glass ceiling, changing their status from employee to employer. Today, women-owned businesses are creating one out of every four jobs in the United States.

From the classroom to the board room, women now occupy every part of the work force, building the kinds of lives for themselves and their families that are the heart of the American Dream.

Women's History Month provides Americans with an opportunity to celebrate the contributions of all the women who have enriched our Nation, to honor their legacy, and to reflect upon what we can all do to end discrimination against women. I encourage all Americans to learn from, and share information about, women's history in their workplaces, classrooms, and family rooms. As every family has its own heroes, so does our country. Only by studying the history of America's women can we fully understand the history of America.

Obituaries

Brown, Sayre, 75, Huntsville, died Feb. 8. He retired from Marshall in 1984 where he worked as an aerospace engineer. He is survived by his wife Berdjouhie "Bert" Brown.

Geiger, William, 81, Knoxville, Tenn., died Jan. 10. He retired from Marshall in 1973 where he worked in Transportation as Chief of Air Operations. He is survived by his wife Katherine Geiger.

McKannan, Eugene, 68, Huntsville, died Feb. 7. He retired from Marshall in 1988 where he was deputy director of the Materials and Processes Laboratory. He is survived by his wife Carolyn McKannan.

Miller, William, 86, Huntsville, died Feb. 9. He retired from Marshall in 1974 where he worked as a contract specialist. He is survived by his wife Joan Miller.

Employee Ads

Miscellaneous

- ★ Engagement ring .82, H,S1, comfort fit band, appraised value \$3,350. Sell for \$2,000 firm. 355-5610
- ★ King size water bed w/dresser \$250 for both. 852-4602
- ★ Sears 3 1/2 HP Roto-Tiller \$50. 881-3707
- ★ Benchcraft large sectional sofa. Black, mauve, plum, teal, brushstroke pattern, six pillows \$500 o.b.o. 828-9651
- ★ Brief case, picnic basket, infant car seat, bassinet, other baby items, maternity clothes. 837-5113
- ★ Riding Mower 12.5 HP 38 inch cut dual blades seven speed, one year old \$675. 881-8674
- ★ Clayton Marcus sofa with two chairs \$250; coffee table \$60; pair of lamps \$25. 883-6284
- ★ Sofa, light blue with small stripe \$250. 883-7752
- ★ Snow skis, Head 160cm, Tyrolia bindings, \$95 o.b.o. 922-0958
- ★ 286 computer, color monitor, printer. 772-3584
- ★ Half carat solitaire engagement ring with white gold antique style setting \$800. 533-0278
- ★ 1987 Dynatrak fish & ski boat, 17.5ft., fully equipped \$6,500. 734-8649
- ★ Mirage high-end 2-way home theater speakers. Left, right, center, surrounds, four stands included \$450. 586-3374
- ★ Tires 194R70-14 \$100. 350-6353
- ★ Child's deluxe swing set \$75. 751-2131

Vehicles

- ★ 1986 Grand Prix \$2,950. 852-4602
- ★ 1990 Buick Riviera 2-door coupe, ruby red, 79K miles, CD player \$7,900. 881-2601
- ★ 1994 Toyota Celica, 39K miles, 1.8L 5-speed, A/C, power steering, Mediterrean blue \$13,400. 882-1431
- ★ 1991 Mazda RX-7 coupe, 54K miles, adult owned, security system, sunroof \$9,350. 881-0645
- ★ 1993 Lexus GS300 Sedan \$1,000 below NADA retail. 881-1718

MARSHALL STAR

Marshall Space Flight Center, Alabama 35812

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- ★ 1992 Taurus GL, automatic in console, power seat, windows, locks, ABS, two airbags, teal green, beige interior, \$6,700. 880-9025
- ★ 1982 Nissan Sentra 97K miles, automatic, A/C, AM/FM cassette radio \$1,200 o.b.o. 883-5591
- ★ 1986 Honda Accord LX 5-speed, 171K miles \$3,500. 830-4477
- ★ 1992 Mercury Grand Marquis GS, 115K miles, blue book \$9,600. 837-9338
- ★ 1991 GMC Pickup Sierra SLE extended cab 350 auto. 536-2919
- ★ 1988 Honda Accord LXI, black/tan interior, sunroof \$4,900 o.b.o. 881-6143

Center Announcements

- ☛ **Southern Belle Riverboat** —The Southern Belle's 1997 cruise will be March 14-15 at Ditto Landing. Lunch at 12 noon and dinner 7 p.m. on March 14 and lunch only at 12 noon on March 15. For information and reservations call 423-266-4488 or 1-800-766-CRUISE.
- ☛ **Easter Egg Hunt Needs Volunteers** — Volunteers are needed to coordinate and assist in the annual NASA Exchange sponsored Easter Egg Hunt. The event is tentatively scheduled for March 16, with rain date on March 22. Call Gena Marsh at 4-0128 to volunteer.
- ☛ **Mail Handlers** — A federal representative from Mail Handlers Benefit Plan will be at the Center on March 6, in Bldg. 4202/Rm. B-108, from 8-10 a.m. to assist employees with questions and claim problems.
- ☛ **NARFE**— The National Assn. of Retired Federal Employees will meet March 8 at the Senior Center on Drake Ave. The program will be presented by John Chase, who will discuss Alzheimers disease support programs available in this area. Refreshments at 9:30 a.m. and program will begin at 10 a.m. For more information, call 837-0382 or 881-3168.
- ☛ **Local Sealed Bid Sale** — A local Sealed Bid Sale of government surplus property will be held March 11 at Bldg. 7427, Warehouse Rd., Redstone Arsenal. Inspection is March 6, 7, & 10 at 8 a.m. to

3 p.m. Bids must be submitted by 3 p.m. March 10. For more information call 842-2570

- ☛ **AFGE Local 3434** — The AFGE Local 3434 will hold its monthly meeting March 11, at 11:30 a.m. in Bldg. 4202/Rm. 224.
- ☛ **Federal Almanac Order** —Please pick up your 1997 Federal Employee Almanacs at the MESA Office, Bldg. 4471/Rm. C105 between 8:30 a.m.-12:30 p.m. The cost is \$9 (\$8 for MESA members). Bookstore cost is \$11.95 plus tax.
- ☛ **Public Service Announcement** —Self Help for Hard of Hearing in Huntsville will feature program development of the "Hearing Aid Bank" at its regular 11:30 a.m. meeting March 13 in the Senior Center classroom, 2200 SW Drake Ave. For information on this organization call 852-4580
- ☛ **NCMA** — The Huntsville Chapter of the National Contract Management Assn. will hold a workshop from 8:30 a.m. to 5 p.m. on March 19 at BDM International, 950 Explorer Blvd. Gregory Forham & Karen Manos will speak on the topic "Commercial Item Acquisition." Early registration cost for members is \$135 & nonmembers \$185. For regular registration cost & forms or more information call Harry Chaffee at 726-1241.

Thank You

From Pat Pressnell — A special thanks to all who have shown an interest in my sister, Pat Pressnell, during her illness and blood cell stem transplant. All of your thoughts, prayers and words of encouragement have been and will continue to be appreciated. Pat's procedure was successful. She is at home and is expected to be completely recovered in a few months. A special thanks to Sam Walls and JA41. Ruth Priest

Job Opportunities

CPP 97-13-CP, AST Basic Properties of Materials, GS-1310-14, S&E, Space Science Lab, Microgravity Science & Applications Div., Biophysics Br. Closes April 14.

CPP 97-14-CP, AST, Basic Properties of Materials, GS-1310-15, S&E, Space Sciences Lab, Microgravity Science & Applications Div., Biophysics Br. Closes April 14.

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